

Wire Rope Isolation Provides Shock and Vibration Protection in Rugged, High Heat Foundry Application

| Enidine Rate Control Application

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Product Overview

A casting facility, located in Japan, for one of the world's leading automotive manufacturers, utilizes AGV's (automatic guided vehicles) to transport sand cores used in the production of engine block and cylinder head molds. To protect the sand cores during shuttling within the foundry, rubber isolation mounts are fitted into the AGV's. But because these do not provide adequate shock protection continuous repairs are required to maintain a smooth travel path. Looking for a way to control the maintenance costs and decrease the damage done to the sand cores, the customer wanted to implement the use of WRI on their AGV's. In reading a technical report on reducing the vibration experienced in control boxes on transfer press machines, the customer was impressed with the ITT Enidine Inc. WRI products used to solve the problem. With their already proven success at another facility, the customer contacted ITT Enidine Inc. for assistance.



Product Solution

ITT Enidine Inc. recommended replacing the rubber mounts on the AGV's with the WR 5-600-10-DM at 10 locations within the vehicle. Using a WRI product was an ideal solution because rubber mounts offer very little shock reduction and have a tendency to stiffen in high temperature environments like a foundry. The WR 5-600 Series offers the ability to reduce dramatically the shock experienced on the equipment as well as provide an indefinite lifetime of the product compared to the rubber mounts.

Application Opportunity

In testing a prototype unit for evaluation, the customer calculated they could reduce 75% of the vibration incurred and save \$72,000 USD per year in path maintenance costs. Very satisfied with the results, the company plans to purchase 200 units for their AGV's this year. The manufacturer currently utilizes over 300 AGV's in their other production facilities such as those for automotive body panels. Several other major automobile manufacturers in Japan utilize similar technology on their AGV's. Given the multitude of applications where the AGV's are utilized the uses of WRI are numerous.